

Application of: Mark A. Hochwalt, et al.  
Serial No.: 10/849,721  
Response to March 26, 2008 Office Action

**REMARKS**

In view of the fact that in response to Applicants' Appeal Brief, filed December 12, 2007, the Examiner has now reopened prosecution, issued a further non-final Office Action, mailed March 26, 2008, and set forth a new ground of rejection, Applicants present this Amendment and Remarks in response hereto.

Claim 60 has been amended to be dependent on Claim 50, thereby correcting the typographical error of the claim being dependent on cancelled Claim 59. No new matter has been added by this amendment.

The rejection of Claims 50-55, 57-69, 71-83, 85-98 and 100-107 under 35 U.S.C. 103(a) over JP 62-292165, in view of Furio (H1579), Gioffre et al. (U.S. Patent No. 4,795,482), Hu 22187T and JP 61-106162, is respectfully traversed.

The newly cited reference JP 62-292165 (hereinafter the "JP '165 patent") discloses an aqueous solution deodorant which is characterized by the fact that an acidic metal salt is compounded with an organic acid with a high acidity. Although the Examiner only cited the JP '165 patent Abstract and did not provide a translation of the specification, it is respectfully submitted that the invention disclosed in the JP '165 specification is clearly distinguishable from the Applicants' invention. The Applicants' have, at their own expense, procured an English translation of the JP '165 patent specification, which is set forth in *Appendix I*, attached hereto for the Examiner's convenience and hereby made of record.

The invention, as defined in the full specification, is clearly distinguishable from the Applicants' invention. In the embodiment set forth in Working Example 1 of the JP '165

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specification, the solution is impregnated into granular activated carbon and dried to form a deodorant supported on the activated carbon. The JP '165 patent also discloses the use of papers and zeolites as support for the JP '165 solution.

The use of a zeolite as a support is discussed in the Applicants' specification as prior art:

In the practice of this invention, the composition of this invention is produced by admixing the readily available components together. This is contrary to prior art odor reducing compositions that describe zeolites coated with metal compounds or serve as a support for metal compounds. Zeolites that are coated with metal compounds, or serve as an inert support for metal compounds, are not suitable for use in the present invention because the metallic coating of zeolites result in at least partial inactivation of the adsorption properties of the zeolite. Accordingly, the zeolite becomes inert, and does not serve an active role in the adsorption of odors as in the present invention. (See Applicants' specification at paragraph 19.)

The JP '165 patent is expressly this type of coated zeolite support. JP '165 does not disclose the admixture of dry components, utilizing the zeolite as an active ingredient in the odor absorbing composition, rather than a support, as disclosed and claimed by the Applicants.

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Further, the Examiner states in the Office Action, mailed March 26, 2008, that the JP '165 patent discloses a composition that is 10-40% metal compound. However, as is seen clearly from the JP '165 specification at Table 2 and the following paragraphs, the stated 10 - 40% is the percentage of zinc chloride to oxalic acid in an aqueous solution, **not** as a percentage of a non-liquid composition including a zeolite, as claimed by the Applicants. Referring to Table 2, the JP '165 specification states:

As is also clear from this table, especially good deodorizing efficacies are shown with specific composition ratios of the oxalic acid and zinc chloride; therefore, it is desirable for the quantity of zinc chloride in the composition to be in the range of 10–40%. (JP '165 patent specification, 2<sup>nd</sup> paragraph following Table 2.)

Moreover, when utilizing the zeolite support, the JP '165 patent discloses the use of 80 -90 % zeolite:

Among these forms in which the deodorant can be used, the form in which it is adsorbed on activated carbon, zeolites, etc., is desirable for application in home air conditioners; in this case, the quantity adsorbed is preferably about 10–20 wt% of the activated carbon or zeolites. (JP '165 specification 4<sup>th</sup> paragraph following Table 2.)

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None of the Applicants' claimed formulations even allows for 80% zeolite. The Applicants' broadest claim, Claim 50, requires a minimum of 30% acid. Further, the preferred embodiments of the Applicants' narrower claims utilize as little as 1-2% zeolite. Therefore, even if JP '165 taught the Applicants' admixture (which it clearly does not), JP '165 teaches against the ratios of components utilized in the Applicants' invention.

The Furio and Gioffre et al. references have been discussed in detail in previous responses and are incorporated by reference herein.

Hu is cited for the use of clintonite in deodorant formulations. Applicant has not made any claims that the use of clintonite is in itself novel.

The Examiner has also cited the Abstract only of JP 61-106162 (hereinafter the JP '162 patent). An English translation of the JP 61-106162 specification is likewise provided for the Examiner's convenience in *Appendix II*, attached hereto and hereby made of record. The JP '162 patent discloses an aqueous divalent iron ion deodorant formulation, as follows:

This invention concerns a deodorant, the principal ingredient of which is the divalent iron ion.

Deodorants which use the reactivity of the divalent iron ion are already known; for example, deodorants comprising the divalent iron ion and L-ascorbic acid (vitamin C) dissolved in an aqueous solvent are known. However, the L-ascorbic acid used as a stabilizer in this case has the problem that it is expensive.

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The inventors performed diligent research to develop an inexpensive stabilizer to replace the L-ascorbic acid used in this case. (See paragraphs 1-3 of section 3. Detailed Description of Invention, JP '162 specification.)

As with the JP '165 patent, the JP '162 patent solution may be used on support:

The deodorant of this invention can be used as is, in an aqueous solution, or it can be used as a gel, with a gelling agent added, or it can be impregnated into a water-absorbent support, e.g., activated carbon, pulp powder, wood powder, sawdust, zeolites, perlite, vermiculite, sepiolite, loess, clay, absorbent cotton, paper, nonwoven fabric, etc. (See paragraph 7 of section 3. Detailed Description of Invention, JP '162 specification.)

Therefore, the JP '162 patent also teaches a prior art metal deodorant that may be utilized on a support. JP '162 does not teach the components or admixture formulation of Applicants' invention.

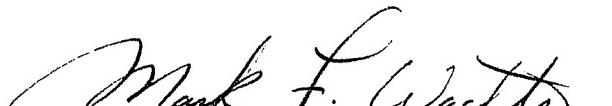
No reference or combination of reference has been cited that teaches the Applicants' admixture formulation. It is therefore respectfully requested that the rejection of Claims 50-55, 57-69, 71-83, 85-98 and 100-107 under 35 U.S.C. 103(a) over JP 62-292165, in view of Furio (H1579), Gioffre et al. (U.S. Patent No. 4,795,482), Hu 22187T and JP 61-106162, be withdrawn.

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If any issue regarding the allowability of any of the pending claims in the present application could be readily resolved, or if other action could be taken to further advance this application such as an Examiner's amendment, or if the Examiner should have any questions regarding the present amendment, it is respectfully requested that the Examiner please telephone Applicant's undersigned attorney in this regard.

Respectfully submitted,

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